

DESCRIPTION

Unipower Telecom's INV2500-HS Series are 2500 volt-ampere, sine wave, hot-swap inverter modules which are available with a compatible, two-unit 19-inch shelf. The shelf is 2RU high (3.5 inches). The units operate off a 48VDC (42-56V range) input and produce either 115VAC output at 22A RMS or 230VAC at 11A RMS. Two units in the shelf produce 115VAC at 44A or 230VAC at 22A. The low distortion 50 or 60Hz sine wave is produced using MOSFET and IGBT power semiconductors with advanced, high-frequency, pulse-width modulation techniques which achieve 90% efficiency and 7.2VA per cubic inch power density.

The units can be paralleled for higher output power or for N+1 redundant applications. When operated in the shelf they are automatically paralleled. They are fully isolated from the telecom battery.

An input circuit breaker turns the inverter on and protects the battery from input faults. An output breaker connects the inverter to the load bus (after synchronization if the bus is live) and quickly disconnects the inverter in the event of an internal fault. The inverter has high surge capability (up to 300%) for starting loads such as motors, but the output breaker quickly trips if power attempts to flow back into a faulted inverter.

Front panel LEDs indicate inverter status, and Form C relay alarm contacts are available on the back. The units are self-cooled by internal fans.

TWO-YEAR WARRANTY

SAFETY STANDARDS

UL60950-1
CSA22.2, No. 60950-1
EN60950-1

www.unipowertelecom.com

NORTH AMERICA CALL: 954-346-2442 • EUROPE CALL: +44 (0)1903 768200



TELECOM INVERTER MODULES

MODEL	INPUT	OUTPUT	FREQUENCY
INV2500-HS-60-E	42-56VDC	115VAC @ 22A	60Hz
INV2500-HS-50-E	42-56VDC	115VAC @ 22A	50Hz
INV2500H-HS-60-E	42-56VDC	230VAC @ 11A	60Hz
INV2500H-HS-50-E	42-56VDC	230VAC @ 11A	50Hz
INV2500-HS-60*	42-56VDC	115VAC @ 22A	60Hz
INV2500-HS-50*	42-56VDC	115VAC @ 22A	50Hz

NOTE: *These two models have the AC neutral output grounded to chassis. The other four models (-E) have floating AC neutral outputs.

INVERTER SHELVES

MODEL	OUTPUT VOLTAGE	SIZE	HEIGHT	MODULE CAPACITY	MAXIMUM OUTPUT
INVR2U-HS	115VAC	19-Inch	2RU	2	5kVA
INVR2U-HS-H	230VAC	19-Inch	2RU	2	5kVA

FEATURES

- ◆ Hot-Swap Replacement in Shelf
- ◆ Two Rack Spaces High: 3.5"
- ◆ 19- or 23-Inch Rack Mounting
- ◆ 2500 VA Module Output
- ◆ 5000 VA for Two Units in 19" Shelf
- ◆ 7.2 VA per Cubic Inch Density
- ◆ 115 VAC at 22 A or 230VAC at 11A
- ◆ Low Distortion 50 or 60Hz Sine Wave
- ◆ 42 to 56 VDC Input
- ◆ Fully Isolated from Battery Input
- ◆ 90% Typical Efficiency
- ◆ Up to 300% Surge Capability
- ◆ Circuit Breaker Input & Output Protection
- ◆ Powers Reactive Loads
- ◆ Form C Relay Alarm Contacts

INPUT

Voltage Range 42-56 VDC
 Input Current, Full Load, 48VDC <60A DC
 Input Current, No Load, 48VDC <1A DC
 Input Protection 100A Circuit Breaker
 EMI Filter, Conducted FCC2078 pt.15J Curve A
 EN55022 Curve A
 Voice Band Noise, 240 A-H Battery <32dBrnC

OUTPUT

Voltage, Full Load 115 or 230 VAC
 Voltage, No Load 120 or 240 VAC
 Current, Max., 115VAC 22A RMS
 230VAC 11A RMS
 Frequency 50 or 60Hz, ±0.1%
 Total Harmonic Distortion <2%
 Load Crest Factor 2.8 to 1
 Output Protection 25A Circuit Breaker
 Surge Capability Up to 300%
 Reactive Loads +90° to - 90° Phase
 Efficiency 90%

SAFETY STANDARDS UL60950-1, CSA22.2 No.60950-1, EN60950-1

STATUS INDICATORS

Input OK Green LED
 Sync OK Green LED
 Output OK Green LED
 Form C Relay Alarm Contacts Inverter Fail Alarm

ENVIRONMENTAL

Operating Temp. Range 0°C to 70°C
 Output Current Derating 2.5%/°C, 50°C to 70°C
 Storage Temp. Range -40°C to +85°C
 Humidity 0% to 95%, Non-Condensing
 Cooling Internal Fans

PHYSICAL SPECIFICATIONS

Case Material, Module Aluminum
 Shelf Steel
 Dimensions, Inches (mm)
 Inverter Module 3.32 H x 8.50 W x 12.25 D
 (84.3 x 216 x 311)
 Shelf 3.46 H x 18.32 W x 16.38 D
 (87.9 x 465 x 416)
 Rack Mounting Width 19 or 23 Inches
 Weight, Module 11.50 lbs. (5.22kg)

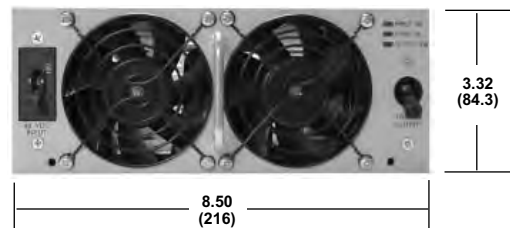
OUTPUT FOR TWO INVERTERS IN A SHELF

OUTPUT VOLTS	OUTPUT KVA	OUTPUT AC AMPS
115VAC	5.0	44
230VAC	5.0	22

NOTES:

- Standard 115VAC modules have neutral connected to ground. "E" Option has a floating neutral. Standard 230VAC modules have a floating neutral (-E).
- The hot-swap shelf comes with a rear, clear plastic safety cover which adds 1.62 inches to its depth.
- 23-inch rack mounting requires panel extenders.

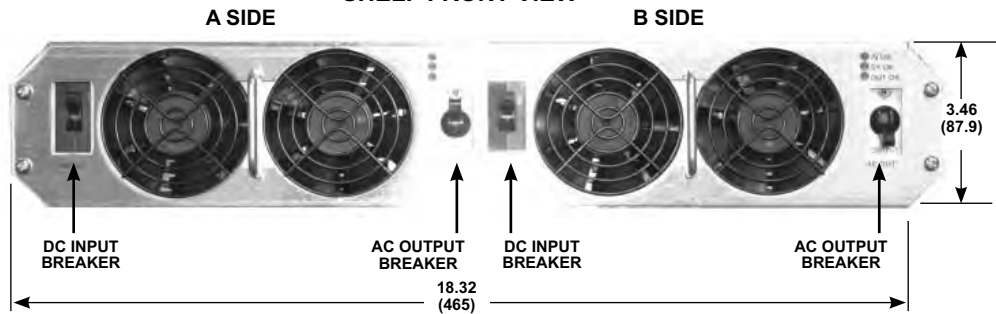
MODULE FRONT VIEW



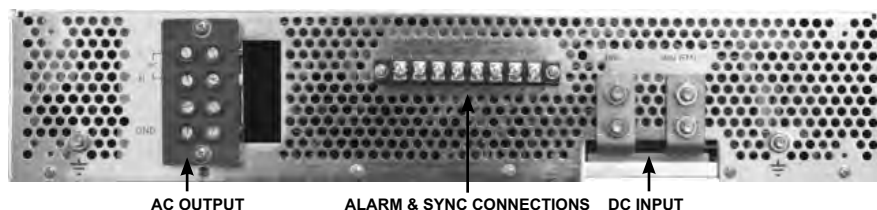
MODULE BACK VIEW



SHELF FRONT VIEW



SHELF REAR VIEW



DPAC2U PARALLELING PANEL

The outputs from up to four INVR2U inverter shelves can be easily paralleled together using the DPAC2U paralleling panel to provide a single bulk AC supply to the load. See separate datasheet.

ALL DIMENSIONS IN INCHES (mm).
 All specifications subject to change without notice.

inv2500-HS-ds-revF-0710